# Statistical Bulletin

METROPOLITAN LIFE INSURANCE COMPANY

*Volume 34* FEBRUARY 1953 *Number 2*

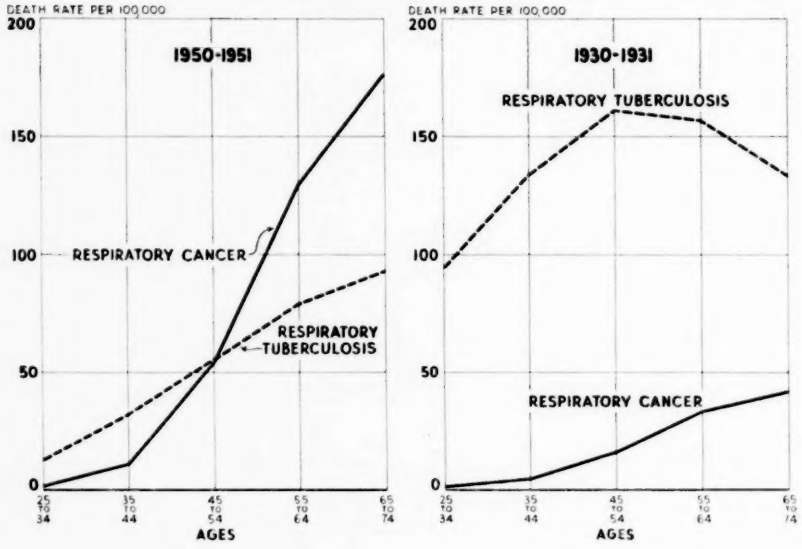
## The Current Situation in Respiratory Cancer

IN the Nation's urban population, which has readiest access to the best diagnostic facilities, cancer now leads all other diseases of the respiratory tract as a cause of death among white males. According to the experience among the Industrial policyholders of the Metropolitan Life Insurance Company in 1950-1951, the death rate from respiratory cancer among insured white males at ages 1 to 74 years was 25.7 per 100,000, compared with 21.9 for respiratory tuberculosis and 14.6 for pneumonia. Among older men, at ages 45 to 74, the differences are even more striking, the rate being 109.0 per 100,000, as against 72.1 for respiratory tuberculosis and 51.0 for pneumonia. Even among white women at these older ages the death rate from respiratory cancer is higher than that from respiratory tuberculosis, the figures being 13.1 and 11.3 per 100,000, respectively.

The rising toll of respiratory cancer, as well as the increasing importance of the disease relative to respiratory tuberculosis, is clearly brought out in the chart on page 2, which shows the death rates from these two conditions, by age, for white male policyholders in 1930-1931 and 1950-1951. In the earlier period (shown in the right-hand panel of the chart), the recorded mortality from respiratory cancer was far below that from tuberculosis throughout life; even at ages 65 to 74 it was less than one third the tuberculosis rate. In contrast, the current death rate from respiratory cancer is approximately the same as that from respiratory tuberculosis at ages 45 to 54; thereafter it is the greater, the margin increasing with advance in age. At 65 to 74 years the cancer rate is nearly double the tuberculosis rate.

In the general population of the United States, too, white males in the aggregate now experience a higher death rate from respiratory cancer than from respiratory tuberculosis. The excess was small in 1950, when the ranking of the two diseases was reversed, but it has since widened materially as a result of the upward trend in the mortality from the malignancies and the continued rapid decline in the toll from tuberculosis. The excess in the re-

**Mortality From Respiratory Cancer and Respiratory Tuberculosis Among White Males, by Age. Metropolitan Life Insurance Company, Industrial Department, 1950-1951 and 1930-1931**




corded mortality from respiratory cancer is greatest in those States which have the most abundant medical facilities or, as in the prairie regions, in which the death rate from tuberculosis is well below the average for the country as a whole.

The level of the death rates from respiratory cancer shows wide variation over the United States. In general, they are highest in the Northeast and lowest in the South, the maximum rates among white males being approximately six times the minimum figures. These geographic variations reflect, in part at least, differences in the age, sex, and color composition of the population, as well as differences in resources for case finding.

The recorded increase in respiratory cancer has by no means been limited to our country. In England and Wales, for example, the rates have been rising steadily and are considerably higher than they are here. In 1949 the death rate among British males was 49.4 per 100,000, compared with 25.2 among white males in the United States, allowance being made for differences in the age distribution of the two groups. For females, the corresponding figures were 9.9 for England and Wales and 6.9 for the United States. In none of our States are the rates as high as in Britain.

Morbidity data on cancer are lacking for the country as a whole, but such information is available for 10

major cities through surveys made in 1947 and 1948 by the National Cancer Institute with the cooperation of State and county medical societies.* Similar studies had been made in these areas about a decade earlier. The recent figures show that in 3 of the 10 cities the incidence of new cases of respiratory cancer reported among males exceeded 40 per 100,000, and in only two cities was it under 30. Among females, the incidence was considerably less—generally about 8 to 9 per 100,000. In all 10 cities the incidence of respiratory cancer in both sexes increased much faster than that of all cancers combined in the decade between the two surveys, doubling or even tripling in several cities.

In the present state of knowledge it is difficult to account for the recorded increase in the mortality and morbidity from respiratory cancer, or even to determine how much of the rise is real. Improved techniques for diagnosis and the greatly increased frequency of their use have resulted in many cases being detected and reported which, in the past, would have been overlooked. This applies especially to diagnostic X rays in medical and hospital practice. Mention, too, should be made of the increase in the number of physicians with training and experience in this field. Contributing in a lesser way to the more frequent discovery of cancer of the respiratory tract is the increasing use of the bronchoscope and of cytological examination of lung secretions.

The wide variation in the frequency of respiratory cancer has led to an increasingly intensive search for environmental factors that may be contributing to the recorded increase in the disease. A number which have been suggested as implicated in its genesis are under study. They range from a few which have been shown to produce lung cancer to others for which the evidence is meager. Thus, on the one hand, it is fairly well established that radioactive materials and some chromates cause lung cancer in experimental animals and in men in certain occupations. On the other hand, the suggestion that the increase in air pollution may be a factor is unsupported by any real evidence. The role of other factors, such as coal tar products, excessive tobacco smoking, and specific contaminants, is still far from conclusive. Actually, the study of the influence of environmnet on cancer involves the evaluation of numerous factors over a long period of time, and accurate data required for such investigations are often difficult, if not impossible, to obtain. Consequently, substantial progress in investigations of this kind is likely to be slow.

In the circumstances, whatever success can be achieved in the control of respiratory cancer depends mainly upon continuing popular education in the symptoms of the disease and the promotion of measures for early detection and treatment. Peri-

**Cancer Morbidity Series*, Public Health Service, National Cancer Institute of the National Institutes of Health, 1952. The 10 cities are: Philadelphia, Pittsburgh, Detroit, Chicago, Atlanta, Birmingham, New Orleans, Dallas, Denver, and San Francisco.

odic medical and X-ray examinations of every person is the most productive means of detecting cases early. Since in practice it is almost impossible to attain this goal, it is vital that routine X-ray examination of the chest be practiced more widely, particularly among men over age 35. Mass X-ray campaigns also should concentrate greater effort on bringing in more men who have reached the main cancer ages

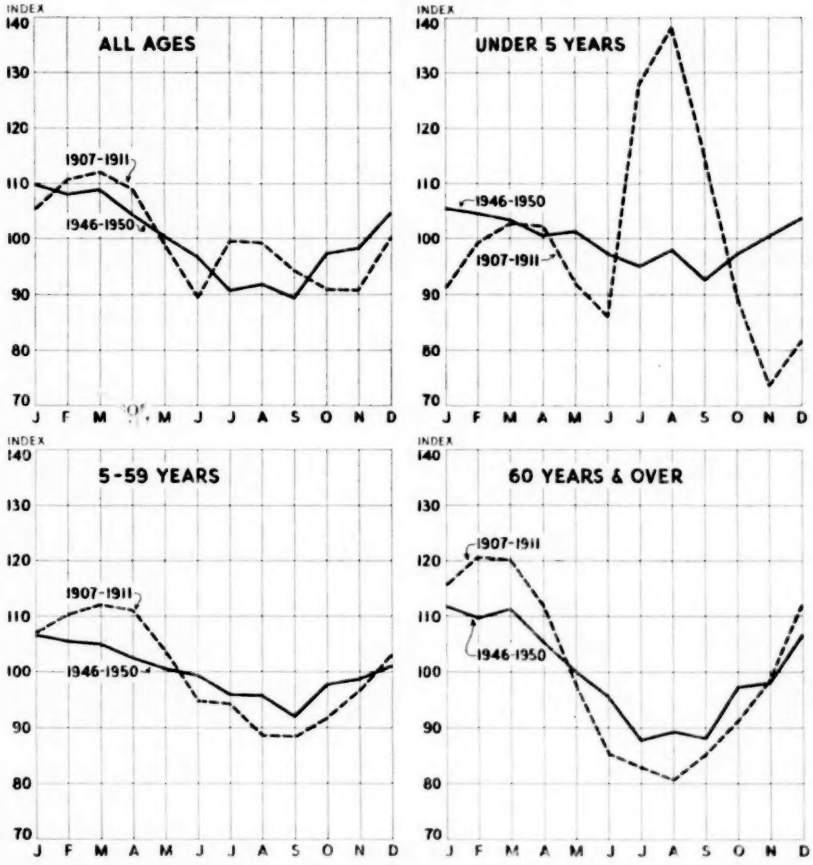
## Seasonal Variation of Mortality Diminishing

DURING the past century the season of maximum mortality has gradually shifted from summer to winter. At the same time the magnitude of the monthly fluctuations has significantly lessened as the infections and other environmental diseases, which are generally seasonal in nature, have been brought under control. Inasmuch as infants and young children have benefited most from the advances in public health, it is not surprising that their seasonal mortality curve has shown the greatest tendency to approach a horizontal line. But the risk of death has also become more uniform throughout the year at the later periods of life.

In the 19th century the death rate, particularly in densely populated areas, was highest during the summer months because of major outbreaks of diarrhea and other intestinal diseases. However, with improvement in milk and water supplies, garbage disposal, and sanitary conditions in general, the summer crest gradually receded. Even after the turn of the century, infants and young children still succumbed in largest numbers during this season. For example, in 1907-1911 the death toll in New York State among children under 5 years of age was fully two fifths higher in August than the average for the year as a whole. Currently, by contrast, the summer months are the safest of the entire year. Moreover, as is evident from the accompanying chart, the monthly fluctuations in mortality among young children have been all but eliminated; in no month now does their chance of death vary by as much as 8 percent from the annual average.

Progress in controlling the summer diseases brought into sharper focus the toll taken by pneumonia, influenza, and the other respiratory conditions during the winter months. With the recent development and application of specific agents against these diseases, the winter peak of mortality from all causes combined has been lessened appreciably. However, the leveling has not been as evident at the older ages as at the other periods of life, primarily because respiratory complications still contribute to the death of many older persons with heart and other degenerative diseases. Nevertheless, even at ages 60 and over the death rate is not as responsive to seasonal variations now as it was in former years. In New York State, for example, the death rate in recent winters has been

**Monthly Variation in Mortality at Specified Ages**
**New York State, 1946-1950 and 1907-1911**




NOTE—The index is the five-year average of daily deaths in specified month, expressed as percentage of average daily deaths in each five-year period as a whole.

only about one tenth higher than the average for the year; before the advent of pneumonia control the seasonal peak at the later ages was twice that high.

While the experience of New York State is fairly representative of that for the country as a whole, there are areas, particularly in the South and Southwest, which have not kept pace with the Nation's progress. No doubt the seasonal curve of mortality in all areas of the country will continue to level off in the years ahead as the advances in medical science and public health administration are utilized more widely and more intensively.

# How Fatal Home Accidents Occur

ACCIDENTS in and about the home constitute a major threat to the life and limb of the American people. Each year such mishaps kill approximately 28,000 people in our country, about 6,000 of them at the main working ages of life. In addition, at least 100,000 persons are permanently crippled or disabled annually in home accidents, and some 4,000,000 more are injured severely enough to be kept from their regular activities for one day or longer.

A wide variety of factors are responsible for injuries sustained in the home, so that there is no simple or easy solution to the problem. Many of the accidents may be attributed to environmental hazards, such as faulty design or construction of the house, poor housekeeping, or inadequate maintenance of appliances and other equipment. Too often a major role is played by such human factors as poor judgment, ignorance of the hazards involved in certain actions, and even fatigue. In many cases an unsafe environment and human failure each contribute their share.

An insight into the circumstances surrounding fatal accidents among adults in and about the home may be obtained from the death claim records of 663 Industrial policyholders of the Metropolitan Life Insurance Company at ages 15 to 69 years who died from such injuries in 1951. The facts are summarized in the table on page 7.

Falls far outranked every other type of accident and were responsible for nearly one half of all the fatalities in each sex. Although falls from chairs, beds, roofs, windows, porches, ladders, and so forth contributed materially to the total, stairs and steps accounted for nearly as many fatalities as all other types of falls combined. A considerable number of accidents were sustained by men and women merely walking about a room, or going from one room to another. In many of these instances a rug was reported as the cause of the fall, but highly polished or wet floors as well as objects left carelessly around added to the death toll. Some of the victims, however, fell because of illness, and others for no apparent reason.

Only a relatively small number of the men killed in falls were reported to be engaged in some household activity at the time of injury. A large proportion of the injuries, particularly those on stairs, occurred when the men returned to their homes from a social evening, work, or shopping. Household duties, however, were a somewhat more important contributing factor in fatal falls among women. Surprisingly enough, only two deaths resulted from falls in the bathtub.

Conflagrations or burns by other means accounted for one fourth of the fatal injuries among males and for one third of the total among females in this insurance experience. No fewer than 34 men and women

were burned to death as the result of careless smoking, and three others were asphyxiated by smoldering mattresses ignited by cigarettes. In most instances the victim dozed off in bed or in an upholstered chair with a lighted cigarette or pipe in the hand or mouth. The foolhardy practice of pouring gasoline or kerosene on fires to kindle or hasten them took the lives of 15 persons. At least 11 others — nine of them women — were fatally burned while cooking or otherwise engaged in the kitchen.

The absorption of poisonous gases also resulted in a substantial number of deaths in and about the home. These fatalities were due very largely to liquids or foods boiling over and extinguishing the flame, inadvertent turning on of stove jets, leaking gas appliances, the use of gas heaters in poorly ventilated rooms, and the seepage of coal gas from stoves or furnaces. Outside the house proper, running an automobile motor in a garage accounted for 11 deaths among men and two among women.

Firearms mishaps accounted for 26 fatalities, indicating the need for more care in the handling and storage of guns in the home. Acute poisoning by solids or liquids took 19

NUMBER OF DEATHS FROM ACCIDENTS IN AND ABOUT THE HOME ACCORDING TO ACTIVITY OF PERSON AND AGENCY INVOLVED. BY SEX, AGES 15 TO 69 YEARS. METROPOLITAN LIFE INSURANCE COMPANY* INDUSTRIAL DEPARTMENT. 1951

| ACTIVITY AND AGENCY INVOLVED | TOTAL | MALES | FEMALES |
|---|---|---|---|
| Home Accidents—Total | *663* | *344* | *319* |
| Injury by falls—total | *314* | *165* | *149* |
| Walking on stairs and steps | 150 | 93 | 57 |
| Walking about on floor | 53 | 10 | 43 |
| Sitting down, getting up from chair, etc. | 9 | 2 | 7 |
| Getting in or out of bed | 9 | 1 | 8 |
| From roof | 15 | 13 | 2 |
| Working on or repairing roof | 8 | 7 | 1 |
| Out of window | 11 | 6 | 5 |
| Washing windows, hanging clothes, etc. | 5 | 1 | 4 |
| From porch | 8 | 6 | 2 |
| From ladder | 10 | 7 | 3 |
| Working or walking around yard | 15 | 11 | 4 |
| Other and unspecified | 34 | 16 | 18 |
| Conflagration | *109* | *56* | *53* |
| Smoking in bed, on chair, other places | 13 | 8 | 5 |
| Lighting stove | 4 | 1 | 3 |
| Kindling fire with kerosene | 3 | 2 | 1 |
| Overheated or defective stove, furnace, etc. | 10 | 6 | 4 |
| Exploding oil stove | 9 | | 9 |
| Defective wiring | 3 | 1 | 2 |
| Fire under stairs, clothes chute, closet | 3 | 3 | |
| Other and unspecified | 64 | 35 | 29 |
| Burns (except conflagration) | *86* | *32* | *54* |
| Smoking in bed, on chair, etc. | 18 | 7 | 11 |
| Burns, etc. (*Continued*) | | | |
| Lighting cigarette | 3 | 3 | .. |
| Warming self or walking near open fire | 12 | 3 | 9 |
| Kindling fire with flammable liquid | 12 | 6 | 6 |
| Cooking or working in kitchen | 11 | 2 | 9 |
| Lighting stove, heater, or fireplace | 6 | 2 | 4 |
| Burning brush, trash | 5 | 3 | 2 |
| Other and unspecified | 19 | 6 | 13 |
| Absorption of poisonous gas and vapors | *71* | *41* | *30* |
| Running automobile motor in garage | 13 | 11 | 2 |
| Heating food or liquids on stoves | 11 | 7 | 4 |
| Using gas stove for warming home | 4 | 3 | 1 |
| Gas heater | 10 | 4 | 6 |
| Coal gas | 6 | .. | 6 |
| Smoking in bed (smoldering mattress, etc.) | 3 | 1 | 2 |
| Defective furnace, gas line | 7 | 4 | 3 |
| Other and unspecified | 17 | 11 | 6 |
| Injury by firearms | *26* | *22* | *4* |
| Showing or handling gun | 9 | 9 | |
| Playing with gun | 7 | 6 | 1 |
| Other and unspecified | 10 | 7 | 3 |
| Acute poisoning by solids or liquids | *19* | *9* | *10* |
| Barbiturate acid and derivatives | 8 | 2 | 6 |
| Other and unspecified | 11 | 7 | 4 |
| All other home accidents | *58* | *19* | *19* |

*Excluding Pacific Coast and Canada.

lives, nearly half of the deaths being attributed to barbituric acid and derivatives.

One of the outstanding facts to emerge from this study is that a large proportion of the accidental injuries in the home are preventable. Fortunately, many communities throughout the country are becoming keenly aware of the toll exacted by home accidents and are launching campaigns to reduce the loss. Marked impetus has been given to the safety movement by the Michigan Conference on Home Accident Prevention held early this year at Ann Arbor, which was sponsored by the University of Michigan School of Public Health, the National Safety Council, and the Public Health Service, and in which the Metropolitan Life Insurance Company participated.

## World-Wide Increase in Proportion of Women

IN large areas of the world females are increasing more rapidly in number than males. This trend is observed not only in countries where males are still in the majority, but also where females have long had superiority in numbers. A comparison of the sex ratios of the population in various countries for the latest year available with those around the turn of the century is made in Table 1 on page 9.

Females now outnumber males in almost all the European countries, particularly communist-controlled areas. Eastern Germany, with 743 males for every 1,000 females, has the greatest imbalance of the sexes in Europe and probably in the world. Although postwar data are not available for the Soviet Union, there is good reason to believe that it has a considerable deficit of males. In 1939, the ratio there was 920 males for every 1,000 females. With the heavy losses of men suffered by the Soviet Union in World War II, it is likely that the ratio is even lower now. The satellite countries, except Bulgaria, likewise show a relatively low sex ratio. On our side of the Iron Curtain, Austria and Western Germany have the largest deficit of males. In Finland, France, Spain, and the British Isles also, the number of men is well below that for women.

Emigration has been one of the major historic factors in depleting Europe's male population. This flood of migrants built up large surpluses of men in the countries of the New World. In the United States, for example, there were 1,044 males for every 1,000 females at the turn of the century; until recent years males had maintained their numerical superiority in our country. In Australia and New Zealand, relatively newly settled areas, males outnumbered females by 1,100 to 1,000 around 1900 and are still in the majority by a slight margin.

The situation in Africa and Asia is more difficult to determine, because large parts of these continents have never been fully enumerated. The countries for which data are

available show a mixed picture. In Egypt, Japan, and Korea, males are numerically in the minority. On the other hand, the Union of South Africa, India, Pakistan, and the Philippine Islands have more males than females. In some of the Far Eastern countries the female population is reduced by infanticide and by a very high maternal mortality. There is also a tendency in that part of the world to underenumerate females in their censuses.

The ratio of males to females in the population varies rather widely with age: Table 2 shows the facts

TABLE 1—MALES PER 1,000 FEMALES IN VARIOUS COUNTRIES
DATA FOR LATEST AVAILABLE POSTWAR YEAR AND AROUND 1900

| COUNTRY | POST-WAR YEAR | AROUND 1900 | COUNTRY | POST-WAR YEAR | AROUND 1900 |
|---|---|---|---|---|---|
| EUROPE | | | NORTH AMERICA | | |
| Austria | 876 | 967 | British Honduras | 942 | 1,044 |
| Belgium | 970 | 987 | Canada | 1,035 | 1,050 |
| Bulgaria | 1,005 | 1,041 | Guatemala | 1,024 | 986 |
| Denmark | 984 | 950 | Honduras | 1,006 | 958 |
| Finland | 921 | 979 | Jamaica | 944 | 917 |
| France | 929 | 968 | Mexico | 974 | 985 |
| Germany | 837 | 969 | United States | 986 | 1,044 |
| Western Germany | 882 | — | SOUTH AMERICA | | |
| Eastern Germany | 743 | — | Argentina | 1,051 | 1,119 |
| Berlin | 738 | — | Brazil | 1,000[4] | 1,040 |
| Greece | 980 | 1,014 | British Guiana | 981 | 1,199 |
| Hungary | 959[1] | 991 | Chile | 983 | 987 |
| Iceland | 999 | 919 | OCEANIA | | |
| Italy | 952 | 990 | Australia | 1,006 | 1,101 |
| Luxembourg | 995 | 1,063 | New Zealand | 1,009 | 1,107 |
| Netherlands | 994 | 976 | AFRICA | | |
| Norway | 975 | 924 | Egypt | 979 | 1,034 |
| Portugal | 942 | 915 | Union of South Africa | 1,035 | 1,076 |
| Roumania | 935 | 1,033 | Europeans | 1,014 | 1,319 |
| Spain | 922 | 954 | Non-Europeans | 1,040 | 1,018 |
| Sweden | 992 | 953 | ASIA | | |
| Switzerland | 950 | 964 | India and Pakistan | 1,069 | 1,038 |
| United Kingdom and Ireland | 937 | 941 | India | 1,057 | — |
| England and Wales | 934 | 936 | Pakistan | 1,126 | — |
| Scotland | 915 | 946 | Japan | 962 | 1,018 |
| Northern Ireland | 950 | 974 | Korea | 994[5] | 1,059 |
| Ireland | 1,024 | | Philippine Islands | 1,025 | 1,002 |
| Union of Soviet Socialist Republics | 920[2] | 989[3] | | | |
| Poland | 912 | | | | |

[1]1941, [2]1939, [3]Excludes Finland, [4]1940, [5]1944

Source of basic data: United Nations Demographic Yearbooks; The Statesman's Year-Books; Annuaire International de Statistique; official publications of various countries; and Bureau of Applied Social Research, Columbia University.

TABLE 2—MALES PER 1,000 FEMALES AT SPECIFIED AGES IN VARIOUS COUNTRIES

| AGE PERIOD (YEARS) | UNITED STATES | ENGLAND AND WALES | FRANCE | GERMANY | JAPAN | POLAND |
|---|---|---|---|---|---|---|
| | *(1950)* | *(1950)* | *(1950)* | *(1946-50)* | *(1950)* | *(1949)* |
| Under 15 | 1,041 | 1,044 | 1,029 | 1,038 | 1,033 | 1,037 |
| 15-19 | 1,024 | 968 | 1,027 | 949 | 1,005 | 1,007 |
| 20-24 | 1,008 | 985 | 1,048 | 554 | 972 | 860 |
| 25-34 | 957 | 990 | 1,034 | 568 | 835 | 857 |
| 35-44 | 962 | 985 | 998 | 715 | 925 | 901 |
| 45-54 | 976 | 914 | 950 | 772 | 1,022 | 851 |
| 55-64 | 985 | 811 | 725 | 787 | 980 | 764 |
| 65 and over | 894 | 711 | 653 | 821 | 730 | 689 |

Source of basic data: United Nations Demographic Yearbooks.

for several countries in different parts of the world. At the younger ages there is everywhere an excess of males, reflecting the greater number of boys than girls at birth. This numerical advantage, however, is gradually diminished as the higher mortality among males than females makes itself felt—a process which at times is accelerated by war. By the time adult life is reached, men are outnumbered. The situation is particularly serious at the older ages. In France, for example, there are about 650 males per 1,000 females at ages 65 and over. In our own country the latest census showed 894 men for every 1,000 women at these later ages. Widowhood is very common at this period of life and presents social and economic problems throughout the world.

## AVAILABLE FOR DISTRIBUTION

The following publications prepared in the Statistical Bureau of the Metropolitan Life Insurance Company will be sent upon request:

1. "Demographic Differentials in Cancer Mortality in Urban and Rural Areas of the United States, 1940." National Office of Vital Statistics, Vital Statistics—Special Reports, Vol. 33, No. 14, September 25, 1952.
2. *Bibliography of Publications and Addresses, 1903 to 1952,* by Dr. Louis I. Dublin.

## DEATH RATES* PER 100,000 POLICYHOLDERS FROM SELECTED CAUSES INDUSTRIAL PREMIUM-PAYING BUSINESS, WEEKLY AND MONTHLY COMBINED METROPOLITAN LIFE INSURANCE COMPANY

### January 1953

| CAUSE OF DEATH | ANNUAL RATE* PER 100,000 POLICYHOLDERS | | | | |
|---|---|---|---|---|---|
| | JANUARY | | | YEAR | |
| | 1953 | 1952 | 1951 | 1952 | 1951 |
| All Causes—Total | 702.0 | 736.1 | 690.1 | 652.4 | 651.7 |
| Tuberculosis (all forms) | 10.4 | 17.9 | 17.3 | 13.5 | 17.9 |
| Tuberculosis of respiratory system | 9.1 | 16.6 | 15.9 | 12.3 | 16.3 |
| Syphilis | 2.9 | 2.4 | 4.9 | 2.7 | 3.8 |
| Communicable diseases of childhood | .4 | .7 | .5 | .5 | .5 |
| Acute poliomyelitis | 1.3 | .4 | .2 | 1.4 | .8 |
| Malignant neoplasms | 122.9 | 128.3 | 118.5 | 122.5 | 123.5 |
| Digestive system | 44.3 | 44.4 | † | † | † |
| Respiratory system | 14.7 | 12.9 | † | † | † |
| Diabetes mellitus | 16.1 | 13.7 | 15.6 | 14.0 | 15.2 |
| Diseases of the cardiovascular-renal system | 366.7 | 382.1 | 358.5 | 331.0 | 336.8 |
| Vascular lesions, central nervous system | 72.8 | 79.9 | 69.2 | 67.2 | 65.8 |
| Diseases of heart | 270.6 | 276.5 | 264.0 | 240.1 | 245.6 |
| Chronic rheumatic heart disease | 15.7 | 14.2 | 14.9 | 13.0 | 13.7 |
| Arteriosclerotic and degenerative heart disease | 199.8 | 203.4 | 192.0 | 175.0 | 179.2 |
| Hypertension with heart disease | 42.5 | 47.5 | 44.7 | 41.8 | 42.8 |
| Other diseases of heart | 12.6 | 11.4 | 12.4 | 10.3 | 9.9 |
| Hypertension without mention of heart | 6.9 | 5.8 | 5.2 | 6.0 | 6.4 |
| General arteriosclerosis | 5.2 | 6.9 | 7.1 | 6.4 | 6.4 |
| Nephritis and nephrosis | 11.2 | 13.0 | 13.0 | 11.3 | 12.6 |
| Pneumonia | 18.5 | 22.2 | 17.6 | 15.3 | 15.8 |
| Influenza | 2.2 | 1.9 | 1.6 | 1.8 | 2.5 |
| Ulcers of stomach and duodenum | 4.2 | 5.4 | 5.4 | 4.6 | 4.6 |
| Appendicitis | 1.3 | 1.3 | .8 | 1.5 | 1.5 |
| Hernia and intestinal obstruction | 3.5 | 4.3 | 3.9 | 3.5 | 4.1 |
| Gastritis, duodenitis, enteritis, etc | 2.2 | 3.2 | 2.3 | 2.8 | 2.6 |
| Cirrhosis of liver | 12.7 | 13.0 | 10.4 | 9.6 | 9.3 |
| Complications of pregnancy, childbirth | 1.3 | .9 | 1.8 | 1.4 | 1.5 |
| Suicide | 5.4 | 7.1 | 6.5 | 5.6 | 6.5 |
| Homicide | 3.4 | 3.0 | 2.7 | 2.7 | 2.9 |
| Accidents—total | 36.4 | 45.9 | 39.1 | 41.2 | 37.8 |
| Motor vehicle | 16.5 | 17.1 | 14.9 | 16.4 | 15.9 |
| Home | 7.3 | 9.1 | 8.6 | 6.9 | 7.7 |
| Occupational (civilian) | 2.6 | 4.5 | 3.0 | 3.6 | 4.1 |
| War deaths—enemy action | 1.6 | 3.4 | 7.8 | 2.9 | 6.2 |
| All other causes | 88.6 | 79.0 | 74.7 | 73.8 | 57.8 |

*The rates for 1953 and 1952 are provisional. †Not available.

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## MORTALITY FROM ALL CAUSES

**METROPOLITAN LIFE INSURANCE COMPANY • INDUSTRIAL PREMIUM-PAYING BUSINESS**
**WEEKLY AND MONTHLY COMBINED**

DEATH RATES PER 1,000 POLICYHOLDERS • ANNUAL BASIS

| | (DEC) | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1952 | | 7.4 | 6.8 | 7.1 | 6.7 | 6.7 | 6.2 | 6.4 | 6.1 | 5.8 | 6.0 | 6.5 | 6.4 |
| 1953 | | 7.0 | | | | | | | | | | | |

*1952 and 1953 figures are provisional*

P.F.M.—PRINTED IN U.S.A.—42099—(2-53)